



#12

RAW SEQUENCE LISTING DATE: 05/21/2001 PATENT APPLICATION: US/09/381,497A TIME: 11:16:56

Input Set : A:\-317-1.app

Output Set: N:\CRF3\05212001\I381497A.raw

## **ENTERED** SEQUENCE LISTING (1) GENERAL INFORMATION: (i) APPLICANT: FitzGerald, David 7 Pastan, Ira Mansfield, Elizabeth 8 Kreitman, Robert 9 (ii) TITLE OF INVENTION: Recombinant Antibodies and 11 Immunoconjugates Targeted to CD-22 Bearing Cells and 12 13 (iii) NUMBER OF SEQUENCES: 15 17 (iv) CORRESPONDENCE ADDRESS: (A) ADDRESSEE: Townsend and Townsend and Crew LLP 18 (B) STREET: Two Embarcadero Center, Eighth Floor 19 20 (C) CITY: San Francisco 21 (D) STATE: California 22 (E) COUNTRY: USA 23 (F) ZIP: 94111-3834 (v) COMPUTER READABLE FORM: 25 (A) MEDIUM TYPE: Floppy disk 26 (B) COMPUTER: IBM PC compatible 27 28 (C) OPERATING SYSTEM: PC-DOS/MS-DOS 29 (D) SOFTWARE: PatentIn Release #1.0, Version #1.30 31 (vi) CURRENT APPLICATION DATA: C--> 32 (A) APPLICATION NUMBER: US/09/381,497A C--> 33 (B) FILING DATE: 21-May-2001 (C) CLASSIFICATION: 34 40 (vii) PRIOR APPLICATION DATA: 37 (A) APPLICATION NUMBER: WO PCT/US98/05453 (B) FILING DATE: 19-MAR-1998 38 41 (A) APPLICATION NUMBER: US 60/041,437 42 (B) FILING DATE: 20-MAR-1997 44 (viii) ATTORNEY/AGENT INFORMATION: (A) NAME: Weber, Ellen Lauver 45 (B) REGISTRATION NUMBER: 32,762 46 47 (C) REFERENCE/DOCKET NUMBER: 015280-317100US (ix) TELECOMMUNICATION INFORMATION: 49 50 (A) TELEPHONE: (415) 576-0200 51 (B) TELEFAX: (415) 576-0300 (2) INFORMATION FOR SEQ ID NO: 1: 54 (i) SEQUENCE CHARACTERISTICS: 56 57 (A) LENGTH: 369 base pairs (B) TYPE: nucleic acid 58 (C) STRANDEDNESS: single 59 60 (D) TOPOLOGY: linear W--> 62 (ii) MOLECULE TYPE: DNA 65 (ix) FEATURE: 66 (A) NAME/KEY: CDS

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67				3) LO												_	
68				O) (C									l hea	avy (	chai	า "	
71	GAA	•		QUENC									AAG	ССТ	GGA	GGG	48
	Glu																40
75	1	• • • •	· · · ·	200	5		001	011	0-1	10					15	0-1	
	TCC	CTG	AAA	CTC	_	TGT	GCA	GCC	TCT	GGA	TTC	GCT	TTC	AGT	ATC	TAT	96
	Ser																
.79			_	20		-			25					30			
81	GAC	ATG	TCT	TGG	$\mathtt{GTT}$	CĢC	CAG	ACT	CCG	GAG	AAG	AGG	CTG	GAG	TGG	GTC	144
82	Asp	Met	Ser	Trp	Val	Arg	Gln	Thr	Pro	Glu	Lys	Arg	Leu	Glu	$\mathtt{Trp}$	Val	
83			35					40					45			•	
	GCA																192
	Ala	-	Ile	Ser	Ser	Gly	_	Gly	Thr	Thr	Tyr	_	Pro	Asp	Thr	Val	
87		50	003	mmc	3.00	3 m.c	55 mgg	3.03	C 3 C	3 3 CT	000	60	220	3.00	CMC	m » C	240
	AAG																240
91	Lys 65	GIY	Arg	Phe	THE	70	ser	Arg	ASP	ASII	75	ήλρ	ASII	TIIL	Leu	80	
	CTG	C A A	አጥሮ	NCC.	λСΨ		λλC	ጥርጥ	GAG	GAC		CCC	ΔͲር	ጥልጥ	ጥልሮ		288
	Leu																200
9.5	Leu	GIII	nec	JCI	85	DCu	Д, 3	DCI	GIU	90			1100	-1-	95	0,10	
	GCA	AGA	CAT	AGT		TAC	GGT	AGT	AGC		GGG	GTT	TTG	TTT		TAC	336
	Ala																
99				100	-	-	-		105	-	_			110		-	
10	L TGG	GGG	CA	A GGG	AC1	г сто	GTO	: ACT	CTC	י ייי	r ccz	1					369
											L GCF	1					303
10:	2 Trp	Gl															303
10: 10:	_	Gly		n Gly					· Val								303
10	_	INE	Glr 115 FORM	n Gly 5 ATION	Thi	: Leu R SE(	val	Th: 120 NO:	Va] ) 2:								303
10: 10:	3 5 (2) 3	INE	Glr 115 FORMA () SE	n Gly 5 ATION EQUEN	Thi FOF ICE (	Leu R SE( CHAR	val DID CTER	Thi 120 NO: RISTI	Va] ) 2: [CS:	. Sei							307
100 100 100	3 5 (2) 3	INE	Glr 115 FORMA () SE	n Gly 5 ATION EQUEN (A) I	Thi FOI ICE ( LENGT	E Leu R SE( CHARA CH: 1	Val DID CTEF L23 a	Thi 120 NO: RISTI	Va] ) 2: [CS:	. Sei							303
10: 10: 10: 10:	3 (2) 5 (2) 3	INE	Glr 115 FORMA () SE	n Gly 5 ATION EQUEN (A) I (B) I	Thing Thing The Tender of	E Leu R SE( CHARA CH: 1 ami	Val DID CTEF 123 a .no a	Thi 120 NO: RISTI mino	Va] ) 2: [CS:	. Sei							303
10: 10: 10: 10: 11:	3 (2) 3 (2) 3 (2) 1 (2)	INE	Glr 115 FORMA () SE	T Gly TION TOUEN (A) I (B) T	Thi I FOI ICE C LENGT LYPE:	E Leu CHARA CH: 1 ami LOGY:	I Val CTER 123 a .no a	The 120 NO: RISTI mind acid near	Val 2: CS: aci	. Sei							303
10: 10: 10: 10: 11: 11:	3 (2) 3 (2) 3 (2) 1 (2)	INF	Glr 115 FORMA () SE ()	G Gly ATION EQUEN (A) I (B) T (D) T OLECU	Thi FOF ICE C LENGT YPE: YPOI ICE T	E Let CHARA CH: 1 ami LOGY:	Val CTEF 123 a no a lir	The 120 NO: RISTI amino acid acar oteir	Val 2: CS: aci	. Sei	r Ala	1					303
10: 10: 10: 10: 11: 11: 11:	3 (2) 3 (2) 3 (2) 1 (2)	INE	Glr 115 FORMA () SE () () () () MO	Gly  TION  EQUEN  (A) I  (B) I  (D) I  DLECU	Thing Thing The Control of the Contr	E Leu CHARA CH: I : ami LOGY: CYPE:	Val CTEF 23 a no a lir pro	Thr 120 NO: RISTI mino ncid near oteir	Val ) 2: ICS: o aci	. Sei .ds	Ala	1 2:	I.vs	: Pro	o Gla	, Glv	303
10: 10: 10: 10: 11: 11: 11:	3 (2) 3 (2) 3 (2) 1 (2) 1 (3) 1 (3)	INE (ii (xi (xi	Glr 115 FORMA () SE () () () () MO	Gly  TION  EQUEN  (A) I  (B) I  (D) I  DLECU	Thing Thing The Control of the Contr	R SECTION OF THE PROPERTY OF T	Val CTEF 23 a no a lir pro	Thr 120 NO: RISTI mino ncid near oteir	Val ) 2: ICS: o aci	.ds ID N	NO: 2	1 2:	. Lys	s Pro		, , Gly	303
10: 10: 10: 11: 11: 11: 11:	3 (2) 3 (2) 3 (3) 1 (3) 5 (3) 7 (3)	INF (ii (xi (xi val	7 Glr 115 FORMA 1) SE () () () () () () SE () SE	n Gly  ATION EQUEN (A) I (B) I (D) I DLECU EQUEN Leu	Thing Thing The Total Telephone The Topological Telephone Telephon	E Leuren SEÇEHARA EN	O Val	Thr 120 NO: RISTI mino acid mear oteir CON:	Yal ) 2: ICS: Daci	.ds ID N Gly	O: 2	ı Z: ı Val			15	5	303
10: 10: 10: 11: 11: 11: 11:	3 (2) 3 (2) 3 (3) 1 (3) 7 Glu 3 (3) 5 (5)	INF (ii (xi (xi val	7 Glr 115 FORMA 1) SE () () () () () () SE () SE	n Gly  ATION EQUEN (A) I (B) I (D) T DLECU EQUEN Leu S Leu	Thing Thing The Total Telephone Tele	E Leuren SEÇEHARA EN	O Val	Thr 120 NO: RISTI mino acid mear oteir CON:	Yal ) 2: ICS: Daci	. Ser .ds ID N Gly 10	O: 2	ı Z: ı Val			15 11e		303
10: 10: 10: 11: 11: 11: 11: 12: 12:	3 (2) 3 (2) 3 (3) 1 (3) 7 (3) 7 (3) 8 (3) 8 (3) 9 (3)	INE (ii (xi (xi Val	Glr 115 FORMA () () () () () () () () () () () () ()	n Gly  ATION  EQUEN  (A) I  (B) I  CDLECUE  EQUEN  Leu  20	Thirm FOR CENGRAL TYPE: TOPOI ULE TIPE IN Value of Series	R SECHARA CH: 1 CH: 1 CH: 2 CH: 2 CH: 2 CH: 3 CH: 3 CH: 3 CH: 3 CH: 4 CH	O Val	Thr 120 NO: RISTI mino ncid near oteir ON: Gly	Yal 2: CS: CS: SEQ Gly	. Ser .ds .ID N .Gly .CGly	NO: 2 V Leu ) V Phe	a 2: 1 Val ≥ Ala	. Phe	e Sei	15 116 )	5	303
10: 10: 10: 11: 11: 11: 11: 12: 12:	3 (2) 3 (2) 3 (2) 5 (2) 6 (2) 7 Glu 8 1 8 Asp	INE (ii (xi (xi Val	Glr 115 FORMA () () () () () () () () () () () () ()	n Gly  ATION  ATION  (A) I  (B) I  OLECU  EQUEN  Leu  20  Trp	Thirm FOR CENGRAL TYPE: TOPOI ULE TIPE IN Value of Series	R SECHARA CH: 1 CH: 1 CH: 2 CH: 2 CH: 2 CH: 3 CH: 3 CH: 3 CH: 3 CH: 4 CH	O Val	Thr 120 NO: RISTI mino ncid near oteir ON: Gly	Yall  2: CCS: CCS: CSEQ COS CSEQ CSEQ CSEQ CSEQ CSEC CSEC CSCS CSEQ CSEC CSCS CSCS	. Ser .ds .ID N .Gly .CGly	NO: 2 V Leu ) V Phe	a 2: 1 Val ≥ Ala	. Phe	Sei 30 i Gli	15 116 )	5 e Tyr	303
10: 10: 10: 11: 11: 11: 11: 12: 12: 12: 12:	3 (2) 3 (2) 3 (2) 5 (2) 6 (2) 7 Glu 8 1 (3) 8 Asp	(iii (xii Val	Glr	n Gly  ATION EQUEN (A) I (B) I (D) I OLECUE EQUEN Leu 20 Trp	Thr I FOR ICE (C ENGT ENGT ENGT ICE (I I Val	R SECHARA CH: 1 CHARA CH	O Val	Thr 120 NO: RISTI mino acid mear bteir CON: Gly	Yall  2: CS: CS: SEQ Gly Ser 25	.ds ID N Gly Gly Gly Gly	NO: 2 v Leu ) v Phe	2: ı Val ∍ Ala	Phe Leu 45	Sei 3( i Glu	15 Tle	5 e Tyr	303
10: 10: 10: 11: 11: 11: 11: 12: 12: 12: 12:	3 (2) 3 (2) 4 (2) 5 (2) 7 Glu 7 Glu 8 1 9 Ser 1 8 Asp	(iii (xii Val	Glr	n Gly  ATION EQUEN (A) I (B) I (D) I OLECUE EQUEN Leu 20 Trp	Thr I FOR ICE (C ENGT ENGT ENGT ICE (I I Val	R SECHARA CH: 1 CHARA CH	O Val	Thr 120 NO: RISTI mmino acid mear teir CON: Gly Ala Thr 40 r Gly	Yall  2: CS: CS: SEQ Gly Ser 25	.ds ID N Gly Gly Gly Gly	NO: 2 v Leu ) v Phe	2: ı Val ∍ Ala	Leu 45	Sei 3( i Glu	15 Tle	Tyr	
100 100 100 110 111 111 112 122 123 124 126 127	3 (2) 3 (2) 3 (2) 4 (2) 5 (2) 7 Glu 7 Glu 8 1 9 Ser 1 8 Asp	(iii (xii Val	Glr	n Gly  ATION  EQUEN (A) I (B) T  OLECU  EQUEN Leu  C Trp  E Ser	Thing Thing Top	C Leu  R SEC CHARA CH: 1 : ami LOGY: CYPE: CYPE: Glu  CYPE CYPE CYPE CYPE CYPE CYPE CYPE CYP	o Val	Thr 120 NO: RISTI minor acid mear oteir CON: Gly a Ala Thr 40 r Gly	Yall  2:  CS:  SEQ  Gly  Ser  25  Thr	. Sei	NO: 2 V Leu V Phe Tyr Ala	2: 1 Val 2 Ala 3 Arg 1 Tyr 60 1 Lys	Leu 45 Pro	Ser 3( 1 Glu 5 2 Asp	15 Tle Try	Tyr Val Val	
100 100 100 110 111 111 112 123 124 126 127 128 130	3 (2) 3 (2) 3 (2) 3 (3) 4 (3) 5 (3) 6 (3) 6 (4) 6 (4) 6 (4) 6 (4)	INE (iii (xii Val	Glr (i) SE (ii) MC (ii) SE (iii) SE (iii) SE (iii) SE (iii) SE (iii) SE (iiii) SE (iiiii) SE (iiiiiii) SE (iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	n Gly  ATION EQUEN (A) I (B) T OLECU EQUEN Leu 20 Trp 5 E Ser	Thing Thing The Server Thing The Thing Thing The Thing	R SECHARA CH: 1 CHARA CH	Value	Thm 120 NO: RISTI mmino cid dear oteir (ON: Gly Ala Thm 40 Gly	Yall) 2: CCS: SEQ Gly Ser Pro Thr	. Sends ds d	OO: 2 OO: 2 OO: 4 OO: 5 OO: 4 OO: 5 OO: 4 OO: 5 OO: 4 OO: 5 OO: 4 OO: 4 OO: 4 OO: 4 OO: 4 OO: 4 OO: 4 OO: 4 OO: 4 OO: 4	2: 1 Val 2: Ala 3 Arg 4 Tyr 60 4 Lys	Leu 45 Pro	Ser 3( 1 Glu 5 Asp	15 Tle ) Thi Thi	Tyr Val Val Tyr 80	
100 100 100 110 111 111 112 120 122 123 130 133	3 (2) 3 (2) 3 (2) 4 (3) 5 (3) 7 (3) 8 (3) 8 (3) 9 (4) 9 (4) 9 (4) 9 (5) 9 (4)	INE (iii (xii Val	Glr (i) SE (ii) MC (ii) SE (iii) SE (iii) SE (iii) SE (iii) SE (iii) SE (iiii) SE (iiiii) SE (iiiiiii) SE (iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	n Gly  ATION EQUEN (A) I (B) T OLECU EQUEN Leu 20 Trp 5 E Ser	Thing Thing The Server	R SECHARA CH: I camil LOGY: CYPE: DESCR Glu CYS Arg CIle TILe TLe TLe	Value	Thm 120 NO: RISTI mmino cid dear oteir (ON: Gly Ala Thm 40 Gly	Yall) 2: CCS: SEQ Gly Ser Pro Thr	ds  ID N (Gly ) (Gly ) (Gly ) (Gly ) (Asr	NO: 2  NO: 1  Let  Phe  Tyr  Ala  75  Thr	2: 1 Val 2: Ala 3 Arg 4 Tyr 60 4 Lys	Leu 45 Pro	Ser 3( 1 Glu 5 Asp	15 Ile Trp Thi Lei	Tyr Val Val Tyr 80	
100 100 100 110 111 111 112 122 123 124 125 136 133 133	3 (2) 3 (2) 3 (2) 4 (2) 5 (2) 6 (2) 6 (2) 6 (2) 6 (2) 6 (2) 6 (2) 6 (2)	INE (iii (xii Val	Glr (i) SE (ii) MC (ii) SE (iii) SE (iii) SI (iii) SE (iii) SE (iiii) SE (iiiii) SE (iiiiii) SE (iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	n Gly  ATION EQUEN (A) I (B) T OLECUE EQUEN Leu 20 Trp 6 E Ser J Phe	Thing Thing The Series	R SECHARA CH: 1 CHARA CH	O Val	Thm 120 NO: RISTI minor cid dear oteir CON: Gly Ala Thr 40 Gly; Arg	Yall) 2: CS: CS: SEQ Gly Ser 25 Pro Thr	ds  ID N (Gly )	NO: 2 VO: 2 VO: 2 VO: 1	2: 1 Val 2: Ala 3 Arg 7 Tyr 60 1 Lys 3 Ala	Leu 45 Pro	Ser 3( 1 Glu 5 D Asp 1 Thr	15 Ile Ile Trp Thi Let Tyr	Val Val Val Tyr 80 Cys	
100 100 100 110 111 111 112 122 123 124 125 136 133 133 133	3 (2) 3 (2) 3 (2) 4 (2) 5 (2) 6 (2) 7 (3) 8 (3) 8 (3) 9 (4)	INE (iii (xii Val	Glr (i) SE (ii) MC (ii) SE (iii) SE (iii) SI (iii) SE (iii) SE (iiii) SE (iiiii) SE (iiiiii) SE (iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	n Gly  ATION EQUEN (A) I (B) T OLECUE QUEN Leu 20 Trp 6 E Ser J Phe	Thing Thing The Service of Column 1	R SECHARA CH: 1 CHARA CH	O Val	Thm 120 NO: RISTI minor cid dear oteir CON: Gly Ala Thr 40 Gly; Arg	Yall) 2: CS: SEQ Gly Ser Thr Gly Gly Ser	ds  ID N (Gly ) (Thi	NO: 2 VO: 2 VO: 2 VO: 1	2: 1 Val 2: Ala 3 Arg 7 Tyr 60 1 Lys 3 Ala	Leu 45 Pro	Ser 30 1 Glu 5 D Asp 1 Thr Tyr	1! Ile Tri Tri Thi Lei Tyi 9!	Tyr Val Val Tyr 80	
100 100 100 110 111 111 112 122 122 123 133 133 136	3 (2) 3 (2) 3 (2) 4 (2) 5 (2) 6 (2) 7 (3) 8 (3) 8 (3) 9 (4)	INE (iii (xii Val	Glr (i) SE (ii) MC (ii) MC (iii) SE (iii) SI (iii) MC (iii) MC (iii) MC (iii) MC (iii) MC (iiii) MC (iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	n Gly  ATION  EQUEN (A) I (B) T OLECUE  EQUEN  Leu  20 Trp  E Ser  J Phe  S Ser  100	Thing Thing The Service of Servic	R SECHARA CH: 1 CHARA CH	Yall Vall Vall Vall Vall Vall Vall Vall	Thm 120 NO: RISTI minor cid dear oteir CON: Gly Ala Thr 40 Gly Grant Series Ser	Yall  2: CS: CS: SEQ Gly Ser Thr Gly Ser 105	ds  ID N (Gly 10 (Gly	NO: 2 NO: 2 VO: 2 VO: 1	2: 1 Val 2: Ala 3 Arg 60 1 Lys 3 Ala	Leu 45 Pro	Ser 3( 1 Glu 5 D Asp 1 Thr	1! Ile Tri Tri Thi Lei Tyi 9!	Val Val Val Tyr 80 Cys	

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Input Set : A:\-317-1.app

Output Set: N:\CRF3\05212001\I381497A.raw

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139
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                                     120
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                   (C) STRANDEDNESS: single
     147
     148
                   (D) TOPOLOGY: linear
             (ii) MOLECULE TYPE: DNA
W--> 150
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                   (B) LOCATION: 1..321
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                   (D) OTHER INFORMATION: /product= "RFB4 light chain"
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     162 Asp Ile Gln Met Thr Gln Thr Thr Ser Ser Leu Ser Ala Ser Leu Gly
                           5
                                              10
     165 GAC AGA GTC ACC ATT AGT TGC AGG GCA AGT CAG GAC ATT AGC AAT TAT
                                                                                 96
     166 Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Asn Tyr
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                                          25
     169 TTA AAC TGG TAT CAG CAG AAA CCA GAT GGA ACT GTT AAA CTC CTG ATC
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     170 Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
                 35
                                      40
     173 TAC TAC ACA TCA ATA TTA CAC TCA GGA GTC CCA TCA AGG TTC AGT GGC
                                                                                192
     174 Tyr Tyr Thr Ser Ile Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
                                  55
              50
                                                      60
     177 AGT GGG TCT GGA ACA GAT TAT TCT CTC ACC ATT AGC AAC CTG GAG CAA
                                                                                240
     178 Ser Gly Ser Gly Thr Asp Tyr Ser Leu Thr Ile Ser Asn Leu Glu Gln
                              70
     181 GAA GAT TTT GCC ACT TAC TTT TGC CAA CAG GGT AAT ACG CTT CCG TGG
                                                                                288
     182 Glu Asp Phe Ala Thr Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Trp
                                              90
                          85
     185 ACG TTC GGT GGA GGC ACC AAG CTG GAA ATC AAA
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     186 Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
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                                         105
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                   (D) TOPOLOGY: linear
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    197
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                                              10
     204 Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Asn Tyr
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                                          25
     207 Leu Asn Trp Tyr Gln Gln Lys Pro Asp Gly Thr Val Lys Leu Leu Ile
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                                      40
    210 Tyr Tyr Thr Ser Ile Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
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     216 Glu Asp Phe Ala Thr Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Trp
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                           85
     219 Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys
                      100
                                          105
     220
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                    (A) LENGTH: 4 amino acids
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     227
                    (B) TYPE: amino acid
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                    (C) STRANDEDNESS:
                    (D) TOPOLOGY: linear
     229
              (ii) MOLECULE TYPE: peptide
     231
              (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
     234
     236
              Gly Gly Gly Ser
     237
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                    (A) LENGTH: 33 base pairs
     243
     244
                    (B) TYPE: nucleic acid
                    (C) STRANDEDNESS: single
     245
     246
                    (D) TOPOLOGY: linear
             (ii) MOLECULE TYPE: DNA
W--> 248
     251
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     253
                    (B) LOCATION: 1..33
     254
                    (D) OTHER INFORMATION: /note= "RFB4 VH5 heavy chain primer"
     257
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                                                                                   33
     259 GGACCTCATA TGGAAGTGCA GCTGGTGGAG TCT
     262 (2) INFORMATION FOR SEQ ID NO: 7:
     264
              (i) SEQUENCE CHARACTERISTICS:
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                    (A) LENGTH: 24 base pairs
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                    (B) TYPE: nucleic acid
                    (C) STRANDEDNESS: single
     267
     268
                    (D) TOPOLOGY: linear
             (ii) MOLECULE TYPE: DNA
W--> 270
     273
             (ix) FEATURE:
     274
                    (A) NAME/KEY: -
     275
                    (B) LOCATION: 1..24
                    (D) OTHER INFORMATION: /note= "gamma-CH1 heavy chain primer"
     276
             (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
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                                                                                   24
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     286
              (i) SEQUENCE CHARACTERISTICS:
                    (A) LENGTH: 54 base pairs
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     288
                    (B) TYPE: nucleic acid
                    (C) STRANDEDNESS: single
     289
     290
                   (D) TOPOLOGY: linear
W--> 292
             (ii) MOLECULE TYPE: DNA
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RAW SEQUENCE LISTING

DATE: 05/21/2001

TIME: 11:16:57

Input Set : A:\-317-1.app Output Set: N:\CRF3\05212001\I381497A.raw 295 (ix) FEATURE: (A) NAME/KEY: -296 297 (B) LOCATION: 1..54 (D) OTHER INFORMATION: /note= "RFB4 VH3 heavy chain primer" 298 301 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8: 303 AGATCCGCCA CCACCGGATC CGCCTCCGCC TGCAGAGACA GTGACCAGAG TCCC 54 306 (2) INFORMATION FOR SEQ ID NO: 9: 308 (i) SEQUENCE CHARACTERISTICS: 309 (A) LENGTH: 27 base pairs 310 (B) TYPE: nucleic acid 311 (C) STRANDEDNESS: single (D) TOPOLOGY: linear 312 W--> 314 (ii) MOLECULE TYPE: DNA (ix) FEATURE: 317 318 (A) NAME/KEY: ~ 319 (B) LOCATION: 1..27 320 (D) OTHER INFORMATION: /note= "RFB4 VH3 dsFv heavy chain 321 primer" (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9: 327 CCGGAAGCTT TTGCAGAGAC AGTGACC 27 330 (2) INFORMATION FOR SEQ ID NO: 10: (i) SEQUENCE CHARACTERISTICS: 333 (A) LENGTH: 28 base pairs 334 (B) TYPE: nucleic acid 335 (C) STRANDEDNESS: single 336 (D) TOPOLOGY: linear W--> 338 (ii) MOLECULE TYPE: DNA (ix) FEATURE: 341 342 (A) NAME/KEY: -343 (B) LOCATION: 1..28 (D) OTHER INFORMATION: /note= "RFB4 VH dsFv(cys) heavy chain 344 345 primer" 348 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10: 28 350 GACCCACTCC AGGCACTTCT CCGGAGTC 353 (2) INFORMATION FOR SEQ ID NO: 11: (i) SEQUENCE CHARACTERISTICS: 356 (A) LENGTH: 48 base pairs 357 (B) TYPE: nucleic acid 358 (C) STRANDEDNESS: single (D) TOPOLOGY: linear 359 W--> 361 (ii) MOLECULE TYPE: DNA (ix) FEATURE: 364 365 (A) NAME/KEY: -

(D) OTHER INFORMATION: /note= "RFB4 VL5 light chain primer"

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/381,497A

(B) LOCATION: 1..48

(i) SEQUENCE CHARACTERISTICS:

375 (2) INFORMATION FOR SEQ ID NO: 12:

(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:

372 GGTGGCGGAT CTGGAGGTGG CGGAAGCGAT ATCCAGATGA CACAGACT

366

367

48

VERIFICATION SUMMARY DATE: 05/21/2001 PATENT APPLICATION: US/09/381,497A TIME: 11:16:58

Input Set : A:\-317-1.app

Output Set: N:\CRF3\05212001\I381497A.raw

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L:33 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
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L:150 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=3
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